



Genger et al. EP 0 958 841 Machine Generated Translation

[0001] Those available invention concerns an artificially respirating mask, those for artificial respiration one Patient over its mouth and/or nose is attachable.

[0002] Conventional artificially respirating masks, like e.g. in Fig. 5a and 5b represented, consist generally of a mask part 2, over the nose and/or that mouth one is brought patients who can be artificially respiration, to an artificially respirating hose 4 to Supply of artificially respirating air and/or to the evacuation of more breathed out Air, and means of mounting 6 for fastening the artificially respirating mask 2 to Patient. The mask part of 2 is by an appropriate contact pressure through the means of mounting 6 to the face form of a patient essentially adaptable. The artificially respirating hose 4 flows, coming from above, into the mask part 2. The means of mounting 6 consist of a first flexible attachment strap 8, that at the lower two corners 10 and 12 in substantial triangular mask part of 2 is fastened. The attachment of the Strap 8 those takes place at the corners 10 at the mask part of 2 via two eyes 14 and 16, and 12 of the mask part of 2 is intended. To the adjustment of the upper corner 18 of the Mask part of 2 a second flexible attachment strap 20 is intended, that the artificially respirating hose 4 partly loops. The two attachment straps 8 and 20 becomes strained around the head of the patient in each case. The artificially respirating hose 4 can do alternatively for the represented execution form of the state of the art also from down to the artificially respirating mask to be advanced.

[0003] The artificially respirating masks of the conditions of the technology, like z.B. in Fig. 5a and 5b dargestellt, haben insbesondere den Nachteil, dass sie relativ schwierig am Kopf eines Patienten zu befestigen sind, weil die beiden Befestigungsbänder sich leicht miteinander verschlingen oder verdrehen, wenn die Maske über den Kopf des Patienten aufgesetzt wird. This can in particular then to problems lead, if the artificially respirating mask must be attached fast at the patient or the patient has head injuries. A further disadvantage consists of it, that by the arrangement of the upper attachment strap the artificially respirating hose on the forehead of the patient is pressed, so that pressure and sores develop can. Also is during the arrangement of the artificially respirating hose downward the danger of the pressure or sores. at the chin of the patient given. Furthermore it is unfavorable that the attachment of the artificially respirating mask with that Attachment strap at the artificially respirating hose does not ensure that the mask part essentially to the face form of the patient, but it is adapted rather the possibility exists that the upper corner of the mask part of Face of the patient is away.

[0004] It is therefore the task of the available invention, an improved To make available artificially respirating mask, simpler the in particular Handling, higher flexibility, a better stretcher comfort and a increased Functionality ensures.

[0005] For the solution of this task the invention proceeds from the basic idea, that the artificially respirating mask a mask base, an artificially respirating hose and means of mounting for the attachment of the mask at the head of a patient exhibits. The means of mounting point two with one another over one Connecting range connected attachment straps up. First attachment strap has an eye at at least one of its ends, in one to Mask base intended hook is hookable. The second attachment strap holds the mask base at at least a further place, preferably by upper end of the mask base by means of a band control element, at the head the patient.

[0006] To the solution the invention goes to this task likewise from that basic idea out that the artificially respirating mask a mask base, one artificially respirating hose and means of mounting for the attachment of the mask at the head a patient exhibits. The mask base is trained in such a way with the fact that the artificially respirating hose at at least two arbitrary connection points to it is connectable, whereby the not used connection point with one catch element is locked.

[0007] These two managing solutions become independent stressed; they can however also in the context of the invention with one another are combined.

[0008] Favorably at the artificially respirating mask according to invention is in particular, that the mask is

simply manageable, D.h. it can do simply at the head one patient to be fastened, on the one hand by the means of mounting simply of above over the head of the patient to be pushed, and the lower attachment strap at the hooks is hung up and on the other hand, by that According to artificially respirating hose the outside circumstances in several directions of Patients to be led away knows. Rotating the attachment straps becomes in addition to a large extent prevented. By the arrangement of the upper attachment strap at the mask base no unpleasant pressure becomes direct or sore effectuation and at the same time is better the mask to those Face form of the patient adapted.

[0009] The invention becomes in the following on the basis a preferential execution form exemplarily described. The designs show in:

Fig. 1 an artificially respirating mask according to invention at the patient also from down supplied artificially respirating hose in front view;

Fig. 2 a side view of Fig. 1 also installed from down Artificially respirating hose;

Fig. 3 eine erfindungsgemäße Beatmungsmaske am Patienten mit von oben zugeführtem Beatmungsschlauch in Vorderansicht;

Fig. 4 a side view of the artificially respirating mask of Fig. 3; and

Fig. 5a and 5b an artificially respirating mask of the state of the art at the patient.

[0010] In the figures 1 to 4 represented the artificially respirating mask according to invention 22 essentially consists of a mask base 24, one Means of mounting 26 and an artificially respirating hose 28. The mask base 24 it is in such a way trained that it over the nose and/or the mouth one the one which can be artificially respiration patients to be brought and has preferably one knows essentially triangular form. In the lower range of the mask base 24 are reciprocal projections/leads 30 intended, at which a hook 32 is trained in each case. That Mask base 24 points a somewhat constricted in the upper range Section 34 up. The artificially respirating hose 28 is at the mask base 24 on at least two arbitrary connection points 36 and 38, preferably from down or, connectably above. The not used connection point, e.g., the upper connection point in figures 1 and 2 or the lower connection point 36 in , one locks for figures 3 and 4 with a catch element 40.

[0011] By the arrangement of several connection points 36 and 38 to Mask base 24 is ensured that the artificially respirating hose 28 according to the outside conditions and/or. the requirements of the patient by arbitrary sides to be supplied can. Thus it is made possible that that patient the artificially respirating mask up-keep can, even if z.B. with one transport, in the OI or from other cause the artificially respirating hose from one other direction to be supplied must.

[0012] The means of mounting 26 for fastening the mask to the head of the patient an upper and a lower attachment strap 44 essentially exhibits 42, by a connecting range the 46 is connected. That connecting range 46 is for instance on half length of the two attachment straps 42 and 44, D.h. if a patient the artificially respirating mask 22 , is the connecting range carries 46 in the neck or back of the head range the patient. The upper attachment strap 42 is preferably a continuous, flexible strap, that within its front range a band control element 48 to attachment of the mask base 24 exhibits. The band control element 48 has two slots 50, by which the upper attachment strap 42 is led. By 50 from the band control element slits the upper strap 42 between the two 48, can the tapered section 34 of the mask base is pulled out 24 the opening developed in such a way to be passed through. When putting that on mask becomes the upper attachment strap 42 strained and the tapered section 34 of the mask base 24 one clamps in the band control element, so that the artificially respirating mask 22 above is fixed.

[0013] In a preferential execution form the lower attachment strap points 44 two ends of 52 and 54 up, at those in each case one preferably from flexible material formed eye 56 and/or 58 is attached. To the lower situation layer that Artificially respirating mask 22 the eyes 56 and 58 of the lower attachment strap 44 become at the hook 32 of the mask base 24 hung up.

[0014] It is however also possible, the lower attachment strap 44 only with one to out-arrange connectable its ends of 52 or 54 with the mask base 24, while the respective other end firmly connected with the mask base 24 is.

[0015] It becomes thus in a simple manner a simply put onable artificially respirating mask 22 production, which is well to the face form of the patient anformbar. Through furthermore the training according to invention of the means of mounting 26 becomes fast creation of the artificially respirating mask 22 makes possible.

[0016] The arrangement of the connection points down 36 and/or. 38 above becomes guaranteed that with artificially respirating air to supplying patients independently of the outside conditions, the artificially respirating hose 28 from different directions to be supplied knows.

[0017] Beside the flexible attachment straps 42 and 44 described before can even if attachment straps, which are adjustable in their length, uses become. Likewise it is conceivable, in place of the band control element 48 with that Slots 50, a hook eye system (Klettverschluss) or other to plan means of mounting. Also for fastening the lower strap 44 other attachment systems which can be connected fast are in the context of the invention been suitable. Here hook eye systems (Klettverschluss) become exemplary, buttoning or compression joints mentioned.